AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-10. (canceled).

11. (new): . A threading control method for moving a cutting tool and a workpiece in synchronicity with rotation of a main spindle to machine thread grooves in the workpiece, the threading control method comprising :

computing the present position of the main spindle ;

generating a correction amount of the main -spindle position in order to make a single - rotation reference signal of the main spindle synchronous with a control cycle, based on the single -rotation reference signal of the main spindle and the computed present position of the main spindle, and correcting, by this correction amount of the main- spindle position, the position of the main spindle so that the single -rotation reference signal of the main spindle and the control cycle are synchronized ;

confirming the synchronization of the control cycle and the cycle of the single-rotation reference signal of the main spindle whose position has been corrected ; and

outputting a command to a threading spindle when the main- spindle single-rotation reference signal and the control cycle are synchronized.

12. (new): The threading control method according to claim 11, wherein the

main- spindle position is corrected in a direction in which the main -spindle rotational frequency decreases.

13. (new): The threading control method according to claim 11, wherein when the deviation between the main -spindle single -rotation reference signal and the control cycle are below a prescribed value, and the rotational frequency of the main spindle is below a designated value, then the position of the main spindle is corrected in a direction in which the rotational frequency of the main spindle increases.

14. (new): The threading control method according to claim 13, wherein the correction amount of the main - spindle position is computed to be below a main- spindle maximum correction, in order that variations in the main-spindle rotation be within a prescribed variation range.

15. (new): The threading control method according to claim 11, wherein the correction amount of the main-spindle position includes a threading start angle.

16. (new): A threading control apparatus for moving a cutting tool and a workpiece in synchronicity with rotation of a main spindle to machine thread grooves in the workpiece, the threading control apparatus comprising

a main-spindle position computing means configured to compute the present position of the main spindle ;

a main-spindle position correcting means configured to generate a correction amount of the main - spindle position in order to make a single-rotation reference signal of the main spindle synchronous with a control cycle, based on the single-rotation reference signal of the main spindle and the present main-spindle position computed by the main-spindle position computing means, and configured to correct, by this correction amount of the main-spindle position, the position of the main spindle so that the single - rotation reference signal of the main spindle and the control cycle are synchronized;

a threading - spindle interpolation starting detection means configured to confirm the synchronization of the control cycle and the cycle of the single-rotation reference signal of the main spindle whose position has been corrected ; and

an interpolation means for each spindle configured to output a command to the threading spindle when the main-spindle single-rotation reference signal and the control cycle are synchronized.

17. (new) The threading control apparatus according to claim 16, wherein the main-spindle position correcting means corrects the main-spindle position in a direction in which the rotational frequency of the main spindle decreases.

18. (new) The threading control apparatus according to claim 16, wherein when the deviation between the main-spindle single -rotation reference signal and the control cycle and the main spindle is below a prescribed value, and the rotational frequency of the main spindle is

below a designated value, then the main -spindle position correcting means corrects the main spindle position in a direction in which the rotational frequency of the main spindle increases .

19. (new): The threading control apparatus according to claim 16, wherein the main-spindle position correcting means computes the correction amount of the main-spindle position to be below a maximum correction, in order that variations in the main-spindle rotation be within a prescribed variation range.

20. (new) The threading control apparatus according to claim 16, wherein the correction amount of the main-spindle position computed by the main-spindle position correcting means includes a threading start angle.